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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,791

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EXAMINER

GREENE, JASON M

ART UNIT

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1797

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DELIVERY MODE

10/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,791	Applicant(s) SCHLEBES ET AL.	
	Examiner Jason M. Greene	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/28/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

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2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the phrase “the inlets” in line 2, but it is unclear if the phrase is referring to the gas inlet, the compressed air inlet, or both. For examination purposes, the phrase was taken to mean the compressed air inlets.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Great Britain Patent GB 1 520 252.

GB 1 520 252 teaches a device (70,72) for removing sparks and other hot particles from a gaseous stream comprising a housing with an inlet and outlet for the gaseous stream and means for removing the sparks or other particles, wherein a bulk

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mineral (glass) material is provided inside the housing in an inlet region facing the inlet and in an outlet region facing the outlet, that the bulk material is arranged in the housing in such a way that the entire gaseous stream is forcibly guided through the bulk material, and that the path followed by the gaseous stream through the bulk material is determined in such a way, depending on the type and grain size of the material, that the gaseous stream is substantially free from sparks after the outlet region, and wherein the material inside the housing is caught between two perforated, spaced apart partitions in Figs. 1 and 2 and page 1, line 40 to page 2, line 41.

6. Claims 1-4, 8, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by German Patent Publication DE 33 04 344 A1.

DE 34 04 344 A1 discloses a device (10) for removing sparks and other hot particles from a gaseous stream comprising a housing with an inlet and outlet for the gaseous stream and means for removing the sparks or other particles, wherein a bulk ceramic material is provided inside the housing in an inlet region facing the inlet and in an outlet region facing the outlet, that the bulk material (4,5) is arranged in the housing in such a way that the entire gaseous stream is forcibly guided through the bulk material, and that the path followed by the gaseous stream through the bulk material is determined in such a way, depending on the type and grain size of the material, that the gaseous stream is substantially free from sparks after the outlet region, wherein the material inside the housing is caught between two perforated, spaced apart partitions (6), wherein the space between the partitions has closable openings (see Fig. 2) for

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filling and emptying the space, wherein the material has a microporous surface, and wherein the material is gravel having a grain size of 8-12 mm in Figs. 1 and 2 and the English language abstract.

7. Claims 1, 2 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by German Patent Publication DE 33 04 483 A1.

DE 34 04 483 A1 discloses a device (2) for removing sparks and other hot particles from a gaseous stream comprising a housing with an inlet and outlet for the gaseous stream and means for removing the sparks or other particles, wherein a bulk ceramic material is provided inside the housing in an inlet region facing the inlet and in an outlet region facing the outlet, that the bulk material (6) is arranged in the housing in such a way that the entire gaseous stream is forcibly guided through the bulk material, and that the path followed by the gaseous stream through the bulk material is determined in such a way, depending on the type and grain size of the material, that the gaseous stream is substantially free from sparks after the outlet region, wherein the material inside the housing is caught between two perforated, spaced apart partitions (4,5), and wherein the material is gravel in Figs. 1 and 2 and the English language abstract.

8. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Application Publication JP 62-1433.

JP 62-1433 discloses a device (1) for removing sparks and other hot particles from a gaseous stream comprising a housing with an inlet and outlet for the gaseous stream and means for removing the sparks or other particles, wherein a bulk ceramic or mineral material (7) is provided inside the housing in an inlet region facing the inlet and in an outlet region facing the outlet, that the bulk material is arranged in the housing in such a way that the entire gaseous stream is forcibly guided through the bulk material, and that the path followed by the gaseous stream through the bulk material is determined in such a way, depending on the type and grain size of the material, that the gaseous stream is substantially free from sparks after the outlet region, and wherein the housing has at least one water inlet (10) opening in the direction of flow into the housing in Figs. 1-6 and the English language abstract.

9. Claims 1, 2 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Great Britain Patent GB 977,878.

GB 977,878 teaches a device (6) for removing sparks and other hot particles from a gaseous stream comprising a housing with an inlet and outlet for the gaseous stream and means for removing the sparks or other particles, wherein a bulk ceramic or mineral material (glass, clay, ceramic, silica) is provided inside the housing in an inlet region facing the inlet and in an outlet region facing the outlet, that the bulk material is arranged in the housing in such a way that the entire gaseous stream is forcibly guided through the bulk material, and that the path followed by the gaseous stream through the bulk material is determined in such a way, depending on the type and grain size of the

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material, that the gaseous stream is substantially free from sparks after the outlet region, and wherein the material inside the housing is caught between two perforated, spaced apart partitions (8,9) in Figs. 1 and 2 and page 4, lines 10-120.

10. Claims 1, 2, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Application Publication JP 7-266053.

JP 7-266053 discloses a device (1) for removing sparks and other hot particles from a gaseous stream comprising a housing with an inlet and outlet for the gaseous stream and means for removing the sparks or other particles, wherein a bulk ceramic or mineral material (4) is provided inside the housing in an inlet region facing the inlet and in an outlet region facing the outlet, that the bulk material is arranged in the housing in such a way that the entire gaseous stream is forcibly guided through the bulk material, and that the path followed by the gaseous stream through the bulk material is determined in such a way, depending on the type and grain size of the material, that the gaseous stream is substantially free from sparks after the outlet region, wherein the material inside the housing is caught between two perforated, spaced part plates, and wherein the housing has at least one compressed air inlet (7) opening for cleaning purposes and the inlet opens in the direction of flow into the housing downstream from the space between the partitions in Fig. 1 and the English language abstract.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication JP 7-266053.

JP 7-266053 discloses the gaseous stream passing through the material at a speed of at least 0.01m/sec in the English language abstract.

While JP 7-266053 does not specify the duration of contact, one of ordinary skill in the art at the time the invention was made would have recognized that the duration of contact could have been selected as a matter of design choice from the teaching of JP 7-266053 based on the flow rate and velocity of the gaseous stream and the depth of the material.

13. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Great Britain Patent GB 1 520 252, German Patent Publication DE 33 04 344 A1, German Patent Publication DE 33 04 483 A1, Japanese Patent Application Publication JP 62-1433 and Great Britain Patent GB 977,878 in view of Japanese Patent Application Publication JP 7-266053.

GB 1 520 252, DE 33 04 344 A1, DE 33 04 483 A1, JP 62-1433 and GB 977,878 do not teach the housing having at least one compressed air inlet for cleaning, but JP 7-266053 teaches a similar system having such a compressed air inlet in Fig. 1 and the English language abstract in order to clean the filter media.

14. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Great Britain Patent GB 1 520 252, German Patent Publication DE 33 04 344 A1, German Patent Publication DE 33 04 483 A1, Japanese Patent Application Publication JP 7-266053 and Great Britain Patent GB 977,878 in view of Japanese Patent Application Publication JP. 62-1433.

GB 1 520 252, DE 33 04 344 A1, DE 33 04 483 A1, JP 7-266053 and GB 977,878 do not teach the housing having at least one water inlet, but JP 62-1433 teaches a similar system having such a water inlet in Figs. 1-6 and the English language abstract in order to eliminate the possibility of ignition from hot particles.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Markels, Kalen, Bruce and Zenz references teach similar systems.

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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (571) 272-1157. The examiner can normally be reached on Monday - Friday (9:00 AM to 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason M. Greene
Primary Examiner
Art Unit 1797

/Jason M. Greene/
9/30/08

jmg
September 30, 2008